

Sex differences in E-navigation

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Sex differences in e-navigation

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Introduction

Males and females search and treat information in electronic environments differently as evident from differences in scan paths (i.e. Roy & Chi, 2003). These differences might not only be cognitive, but also biomechanical in their origin (Kimura, 1999; Wilner & Nakayama, 2006). In this study we try to distinguish between the biomechanical and the cognitive aspects of these sex differences. We asked subjects to track and/or click on a stimulus on the screen with the mouse while manipulating perceptual load in different ways.

Tasks

- tracking of a translating or rotating ball
- clicking on disks presented at a random position

Manipulations

- BALLS velocity, distractors
- DISKS size, contrast, distractors



Analysis

Step 1 Scatter plots

Step 2 Vector path algorithm $N=6$

Step 3 Comparison scan and mouse paths

Step 4 Comparison sexes

